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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,232		07/25/2001	Candice Hellen Brown Elliott	CLRV-001CIA	8209
42304	7590	7590 01/06/2005		EXAMINER	
CLAIRVO		•		LESPERAN	CE, JEAN E
	4 GRAVENSTEIN HIGHWAY SOUTH, SUITE 14 BASTOPOL, CA 95472			ART UNIT	PAPER NUMBER
		2674			
		DATE MAILED: 01/06/200	5		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/916,232	BROWN ELLIOTT, CANDICI
		Examiner	Art Unit
		Jean E Lesperance	2674
 eriod for	The MAILING DATE of this communication Reply	on appears on the cover sheet wi	th the correspondence address
THE M Extensi after SI - If the po - If NO po - Failure Any rep	RTENED STATUTORY PERIOD FOR IT AILING DATE OF THIS COMMUNICAT ons of time may be available under the provisions of 37 of	ION. CFR 1.136(a). In no event, however, may a ricon. s, a reply within the statutory minimum of thir period will apply and will expire SIX (6) MON y statute, cause the application to become AE	eply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication IANDONED (35 U.S.C. § 133).
tatus			
1)⊠ F	Responsive to communication(s) filed on	03 September 2004.	
-	• •	This action is non-final.	
3)□ S	ince this application is in condition for a	llowance except for formal matt	ers, prosecution as to the merits is
С	losed in accordance with the practice un	nder <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.
ispositio	n of Claims		
4) 🛛 C	claim(s) $1-101$ is/are pending in the appl	ication.	
48	a) Of the above claim(s) is/are wi	thdrawn from consideration.	
5)⊠ C	laim(s) <u>1-22,28-45 and 50-81</u> is/are allo	owed.	
·	laim(s) <u>23-27,46-49 and 82-101</u> is/are r	rejected.	
·	slaim(s) is/are objected to.		
8) C	claim(s) are subject to restriction	and/or election requirement.	
pplicatio	n Papers		
9)∐ TI	ne specification is objected to by the Ex	aminer.	
	ne drawing(s) filed on <u>25 July 2001</u> is/ar		-
	pplicant may not request that any objection		. ,
	eplacement drawing sheet(s) including the	•	` ' '
11)[ne oath or declaration is objected to by t	the Examiner. Note the attached	Office Action or form PTO-152.
riority un	der 35 U.S.C. § 119		
12) 🗌 A	cknowledgment is made of a claim for fo	oreign priority under 35 U.S.C. §	119(a)-(d) or (f).
a) <u></u>	All b) ☐ Some * c) ☐ None of:		
1	. Certified copies of the priority docu	ments have been received.	
	Certified copies of the priority docu		
3	. Copies of the certified copies of the		received in this National Stage
	application from the International E		
* Se	e the attached detailed Office action for	a list of the certified copies not	received.

Attachment(s)

1)	\boxtimes	Notice of	References	Cited	(PTO-892)
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2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/3/2004.

4)	Ш	Interview Summary (PTO-413)
		Paper No(s)/Mail Date
51		Notice of Informal Patent Applies

5) Notice of Informal Patent Application (PTO-152)

6) [_	Other:	
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DETAILED ACTION

1. Claims 1-101 are presented for examination.

- 2. The amendment filed on 9/3/2004 has been received and entered.
- 3. The allowable subject matter of claims 23-27, 46-49 and 82-86 are withdrawn.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 93 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 93 recites the limitation "said image capture device" in line 5 where this limitation was not mentioned previously. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 23-27, 46-49, 82-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent # 6,144,352 ("Matsuda et al.").

As for claims 23-27, 46-49, Matsuda et al. teach a red emitter that can occupy a left unit-area polygon in said first pixel row depending on how Fig.2A is rotated; a green emitter that can occupy a left unit-area polygon in said second pixel row and a red emitter that can occupy a right unit-area polygon in said second pixel row depending on how Fig.2A is rotated; and a blue emitter that can occupy a center unit-area polygon in both said first and second pixel rows depending on how Fig.2A is rotated and it is obvious to know that two blue emitters should be connected to the same data driver which is where they have to receive their video signal. The prior art does not explicitly teach a left and a right unit area polygon, a blue emitter square shaped, and L-shaped green and red emitters. The prior art teaches an arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue signal where the arrangement of Fig.2A (10) is consisting of three color pixels elements.

Thus, It would have been obvious to a person of ordinary skill in the art to modify the arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue signal where the arrangement of Fig.2A (10) to achieve the function of a left and a right unit area polygon, a blue emitter square shaped, and L-shaped green and red emitters because it would provide an LED display device includes an LED display section including a plurality of light emitting blocks arranged in a matrix, each light emitting block including at least a red LED, a green LED and a blue LED and it is

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also obvious a person of ordinary skill in the art to know if two devices can perform the same function their shape does not matter.

As to claims 82-86, Matsuda et al. teach an arrangement of LEDs in each light emitting block of red color signal, green color signal, and blue color signal where the arrangement of Fig.2A (10) is consisting of two pixels, first pixel and second pixel. The arrangement can be divided into four different quadrants where the blue color is at the center of the quadrants disposed at the origin of an X and Y coordinates system forming a first, a second, a third, and fourth quadrant corresponding to providing a three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows, and wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row; and driving said blue emitters, said red emitters, and said green emitters, wherein said blue emitters of said three-color pixel element is coupled to a pair of blue emitters of a next nearest neighboring three-color pixel element.

As for claims 87, 88, 90, 92-94, 97 and 98, Matsuda et al. teach a three color pixel elements Fig.2A (10) which is comprising of at least a blue emitter, a red emitter and a green emitter and it is obvious to know that two blue emitters of two three-color

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pixel elements should be connected to the same data driver or same column driver because that is where they have to receive their video data for the display.

As for claims 89, 96 and 99, Matsuda et al. teach a LED display device Fig.1 (11), which can be an organic LED.

As for claim 91, Matsuda et al. teach two neighboring blue emitters that are connected to the same row driver (see Figure 1).

As for claims 95, 100 and 101, Matsuda et al. teach Figure 3 with each emitter is capable of being driven with a variable analog signal and having a column direction and a row direction as a first direction.

Allowable Subject Matter

6. Claims 1-22, 28-45 and 50-81 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the claimed invention is directed to an array for a display. The prior art fails to anticipate or render obvious a uniquely distinct feature "three column lines associated with each said column position in said array, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said origin of said rectangular coordinate system in each of said three-color pixel elements, a second of said column lines coupled to said blue emitter in said column position disposed at said origin of said rectangular coordinate system in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said origin of said rectangular

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coordinate system in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element". Furthermore, the prior art fails to anticipate or render obvious a uniquely distinct feature "a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element". The prior art fails to anticipate or render obvious a uniquely distinct feature "wherein at least two blue emitters of at least two three-color pixel elements are connected to the same driver and a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said image capture device and wherein at least two blue emitters in a same first direction of at least two three-color pixel elements are connected to a same data driver".

Response to Amendment

7. Applicant's arguments filed 9/3/2004 have been fully considered but they are not persuasive. The applicant argued that Fig.2A of the prior art is not the same as Fig.1 of the present invention. Examiner disagrees with the applicant because they are exactly the same thing. They both teach a three-color pixel elements which is comprising of at least a blue emitter, a red emitter and a green emitter. The applicant argued that the amended claims 23 and 46 traverses the rejection because of the following change "wherein at least two blue emitters of at least two three-color pixel elements are connected to a same data driver". Examiner disagrees with the applicant on the above statement. It is obvious in the art to have two similar sub-pixel to be connected to the

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same video driver because there is only one data driver. The applicant argued that the amended claim 82 traverses the rejection because of the following change "wherein said blue emitter of said three-color pixel element is coupled to a blue emitter of a next nearest neighboring three-color pixel element". Examiner disagrees with the applicant because when the blue emitters are in the same array of pixel, it is obvious that the nearest ones are going to be connected to each other first. The applicant argued that nowhere in Matsuda et al. there is a teaching or suggestion for sharing of such drivers by blue emitters. Examiner disagrees with the applicant, it is obvious in a display array for all the sub-pixels to share the same data driver because there is only one. Therefore, the rejection is maintained.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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examiner should be directed to Jean Lesperance whose telephone number is (703)

308-6413. The examiner can normally be reached on from Monday to Friday between

8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Any inquiry concerning this communication or earlier communications from the

supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

Jean Lesperance

Date 1-3-2005

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